



SUPPORTING
ECONOMIC
TRANSFORMATION

KENYA AS A SERVICES HUB

The Role of Services in Economic Transformation

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- Background information for sessions 1, 2 and 3
- Questions for sessions 1, 2, and 3
- Appendix with data analysis



Setting the context: economic transformation, services and Kenya

The quality of economic growth matters. **Economic transformation is needed for the type of growth that leads to poverty reduction.** This is growth that (a) generates income broadly across the income distribution, (b) is robust against price shocks and price cycles, and (c) increases the opportunities and options for future economic growth. Focusing on economic transformation involves understanding the determinants of growth and productivity at the micro/firm and macro level, including how resources shift to higher-value uses and diversification of a country's productive capabilities, including its exports.

We define economic transformation broadly as moving labour and other resources from lower to higher productive activities. This includes moving between sectors to higher-value activities (for example, from agriculture to manufacturing or services) and within sectors (for example, from subsistence farming to high-value crops) and value chains. It usually also involves diversification, discovering new capabilities and increased domestic value addition in trade.

The debate on economic transformation has so far paid more attention to agriculture and manufacturing, and less attention to the role of services in economic transformation. But given that the majority of growth in Africa over the last decade has come from services, there is renewed interest in the role of services in driving economic transformation. What are the links? How do services, manufacturing and agriculture interact? Would a services centred transformation drive help Kenya's transformation and create jobs? Or would it have negative implications for other important sectors.

Kenya has the potential to offer many lessons as well as learn lessons from such analysis. On the one hand, Kenya offers lessons as it has already been able to become a major exporter of services in areas such as transport services, financial services and to a lesser extent ICT or communication services. Kenya's Vision 2030 prioritised a number of sectors in driving transformation and these include Tourism, Retail Trade, Business Process Outsourcing and Financial Services. On the other hand, Kenya's services attention also faces challenges in (i) bringing the services sector up to the level of the most successful global service exporters; and (ii) in ensuring job creation and economy wide benefits.

This concept note is background material for the workshop which will assess the role of services in economic transformation and job creation in Kenya in general, followed by in depth discussions of two services sectors (IT enabled services, financial services). The aims of the workshop are to (i) examine Kenya as an example of services-led transformation (ii) examine what needs to be done to raise Kenya's services sector to become a regional and global services hub; (iii) examine the costs and benefits of a services-led approach to economic transformation and employment vis-à-vis an agriculture or manufacturing-led approach.

This note covers the three sessions in the workshop. For session 1 it is useful to read the sections on (1) defining services; (2) Kenya as a services hub; (3) the potential and risks of a services hub; and (4) discusses the links between services and jobs. For session 2, one should read the section on IT enabled services and for session 3 the section on financial services. The appendix includes a range of data on services.

Defining services

There are two data concepts categorising services: (i) National Accounts and (ii) Trade in Services. The National Accounts distinguish amongst the following services, ordered in share of GDP (measured by value added at factor costs) in Kenya in 2013 (using rebased data, see appendix):

- Real estate (8.9% of value added at factor costs)
- Wholesale and retail trade (8.8%)
- Transport and storage (8.3%)
- Finance and insurance (7.4%)
- Education (6.1%)
- Public administration (5.4%)
- Professional and support services (2.5%)
- Health (1.8%)
- Information and communication (1.6%)
- Other services (1.5%)
- Accommodation and restaurants (1.4%).

Trade in services are often grouped around the 12 WTO GATS (The General Agreement on Trade in Services) sectors: 1) business services, 2) communication services, 3) construction and related engineering services, 4) distributional services, 5) educational services, 6) environmental services, 7) financial services, 8) health related and social services, 9) travel related services, 10) recreational, cultural and sporting services, 11) transport services, and 12) other services. The General Agreement of Trade in Services (GATS) uses four different modes of supply of services: cross-border supply (Mode 1), services consumed abroad (Mode 2), services supplied via commercial presence abroad (Mode 3) and services supplied via temporary movements of labour (Mode 4).

World Bank data on trade in services distinguish amongst four types of commercial services: 1) travel; 2) transport, 3) communication, 4) finance and insurance. These data only measure mode 1 and 2 trade.

The services sector is an important component of any country's economy, but it is a heterogeneous category. Some make a direct and significant contribution to GDP and job creation, and provides crucial inputs for the rest of the economy, thus having a significant effect on the overall investment climate. Other service sectors such as the health, education, water and sanitation sectors, are also directly relevant to achieving social development objectives.

Kenya as a services hub?

The appendix assesses the role of services in economic transformation on the basis of a number of indicators. It makes the following observations on Kenya:

- It is slightly ahead of the average in terms of share of services in value added (but other African countries are catching up), 50.7% in Kenya compared to 50% on average at that level of income
- It is below the average in terms of share of services in employment. The share in GDP of the *least* employment intensive service sectors had the *largest* increase.
- Exports of services from Kenya nearly tripled from \$1.9 billion in 2005 to \$4.9 billion in 2012, whilst exports of goods and services doubled from \$5.3 billion to \$11.0 billion from 2005-2012.
- It is much above the average in terms of share of services in trade (44% in 2012 compared to 33% for a country at a similar level of income), with the share of transportation service in service exports greater than average, but travel services less than average
- Ahead of most comparator countries in the *level* share of contribution of services to value added in exports (19% in 2001), but not in the *growth* in the share of the contribution over the last decade.
- Labour productivity in services is more than 3 times higher than in agriculture and 1.5 times than in industry. But there is much heterogeneity across services sectors.

The data suggest that the services sector in Kenya has played a comparatively important role; however several other African countries have experienced more dynamism in the services share of GDP over the last decade. There are also notable experiences in Kenya, e.g. financial and insurance services have done particularly well. Moreover, exports of services have been buoyant (though much is regional in nature). There are increasingly financial services and ICT clusters. Hence, Kenya is rapidly consolidating its position as a regional services hub.

The potential and risks of a services-led strategy in Kenya

We consider three concepts of a services-led economic transformation strategy (in practice Kenya has some characteristic of all three):

- Services *at the service* of the economy as a whole
- An isolated service sector servicing itself
- An agglomeration of poor services

Services at the service of the economy as a whole, including manufacturing and agriculture. Access to services is low in Africa generally (e.g. electrification rates), and where there is access, the cost of services are high; road freight, water and electricity services in African countries are twice as expensive compared to other developing countries – high trade cost will hamper the development of (manufacturing and agriculture) value chains and economic transformation. Moreover, the interest rate spread (between deposit and lending rates) is 2 pp higher in SSA than in other developing countries – an inefficient intermediation function will go against transformation and diversification. Growth diagnostics and value chain analyses often find that the specific service sectors are binding constraints to growth and development. And studies find a positive link between services productivity and manufacturing productivity.

An isolated services sector which maximises services export revenues and capital inflows but with few links to the rest of the economy. In this situation, the links to the wider economy and transformation are more complex in this case. On the positive side, increased export revenues from e.g. ICT or financial services are welcome. This will also attract more short-term capital, which could be risky and inflationary. Indeed, it would increase the real effective exchange rate (which has happened in Kenya in recent years) and draw in resources such as skills which hampers competitiveness of manufacturing and agriculture. Manufacturing is traditionally the main sector responsible for the diffusion of innovation and productivity change, but it has lost competitiveness and performed poorly. As an example of the failure to link financial services to the rest of the economy much of the commercial bank lending in African countries does not go to the real sector, SMEs or long term infrastructure (instead it goes to consumer lending and real estate) limiting its role in transformation.

An agglomeration of poor services involving urban agglomeration of low skill, informal activities. This could be detrimental to transformation. Over the past decade many African countries have experienced rapid urbanisation rates, but without the same level of manufacturing job creation seen in Asian economies. The data suggest that people move too quickly into low skill services with relatively low productivity growth, e.g. informal retail trade. Rodrik calls this premature deindustrialisation. In this context, too much emphasis on services could be problematic. And the message is that differentiation amongst services activities is crucial.

The key questions for Kenya around this include:

- How can the links between services (e.g. ICT, finance) to other sectors be maximized? How can it best help manufacturing and agriculture competitiveness?
- What is the balance between services for the domestic economy and services for exports?
- What is the evidence for premature deindustrialisation and jobs moving into low productivity services sectors, and should it be halted? If so, how can this be done?

The link between services and employment in Kenya

A further topic of relevance is the link between services and employment. This covers the following type of effects:

- Direct effects (e.g. employees in services firms)
- Indirect effects through input-output analysis (jobs created in supplier industries)
- Second-order effects, e.g. productivity effects and forward looking linkages to jobs elsewhere in the economy

Employment intensity and quality differs by service sector. For example, we can rank the employment intensity (of wage employment) of value added (Ksh million) by sector as follows:

- Health (1.63 employee per Ksh million)
- Education (1.55)
- Information and communication (1.35)
- Accommodation and restaurants (1.26)
- Public administration (0.95)
- Professional and support services (0.63)
- Wholesale and retail trade (0.57)
- Other services (0.48)
- Transport and storage (0.22)
- Finance and insurance (0.21)
- Real estate (0.01)

This ranking is almost the opposite of the ranking of share in GDP, so those sectors that are important in GDP tend to have a low employment intensity. It clearly shows some service sectors are more employment intensive (e.g. health, education and ICT) than others (transport or finance) which are the ones that have driven exports of services. (For comparison the wage employment intensity for agriculture and manufacturing is 0.28 and 0.57).

One important conclusion from the appendix is that the share in GDP of the *least* employment intensive service sectors had the *largest* increase. This means that growth in services has taken place in those service sectors that have the least direct contribution to employment.

Of course, the job effects are not only direct. The next steps would be to examine indirect linkages with others sectors (e.g. tourism would score high) and employment creation through productivity spillovers (e.g. transport and financial services).

A further important point is related to the skill intensity of employment. Some sectors such as financial services and ICT might be skill intensive, whilst other sectors such as retail trade or tourism might be less skilled intensive. In relation to poverty reduction, the ability to provide wage employment to low skilled workers is important.

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- What is the evidence for premature deindustrialisation and jobs moving into low productivity services sectors, and should it be halted? If so, how can this be done? Or is it important to promote services sectors that employ a large numbers of poor people.

IT enabled services and economic transformation in Kenya

In less than a decade Kenya has emerged from being a “technological backwater” into a establishing a reputation as a leader of IT-led economic transformation in Sub-Saharan Africa with Nairobi laying claim to being the “Silicon Savannah”. The transition has been driven by the combination of visionary and determined efforts both in the private and public sectors. Perhaps the most iconic is M-Pesa, the pioneering mobile payments system that has earned worldwide renown and is being emulated by countries all around the globe. Its salience lies not only in providing access for the “unbanked” to modern money transfer and other financial services but also its role as a platform for continuing innovations and new business models that are transforming commerce in general.

Equally significant was the advent of the fibre-optic cable infrastructure starting with the first East African landing of such undersea cables in Mombasa five years ago and complemented by significant public investment in inland backbone. The government also explicitly identified Business Process Outsourcing (BPO) as a key sector in its Vision 2030 that would make Kenya the preeminent destination both among firms seeking to locate such activities in Africa as well as among educated youth seeking productive employment. In quantitative terms, the aim was 20,000 direct jobs and output of KSh 10 billion by 2012.

Kenya has certainly achieved considerable success in the IT industry (particularly areas associated with mobile telecommunications) as well as business and professional services (notably BPO). However, not surprisingly, due to rapid technological change and evolving business models, the accomplishments are different from those originally envisaged, requiring changes in policy and strategic direction. Kenya boasts remarkably high mobile and internet penetration rates and the contribution of the internet economy to GDP reportedly exceeds most other developing countries (not just Africa). Exports of IT services (including telecommunications) were \$468 billion in 2012 and public expenditure continues to focus on ICT, both broadband infrastructure as well as laptops for schoolchildren. On the other hand, BPO ambitions have had to be tempered. The Kenya brand appeal is still radiant, IT/ITeS sector remains attractive to domestic and foreign investment and perhaps most promising is the emergence of the country as a hub for digital innovation, albeit overwhelmingly concentrated spatially in and around Nairobi. The challenge going forward is to sustain, scale up and spread these developments.

The role of IT in improving competitiveness and driving broad-based economic transformation is now no longer in dispute even for developing countries. An extensive economic literature also demonstrates that, notwithstanding the critical importance of the IT/ITeS sector in expanding exports and generating employment in some countries, the biggest contribution comes from increasing productivity both directly through technology and through new business processes and economic organization. This aspect becomes especially relevant for Kenya as the latest mega-trends in the industry, especially Mobile communications, Cloud Computing and Social Media are precisely those where its relative strengths lie.

Issues for Discussion

- **What has been the experience of the IT/ITeS sector in Kenya over the past decade?** Has the promise of Kenya’s IT potential been realized or exceeded? Where did it fall short? What unforeseen consequences or pitfalls emerged? Does the experience of other countries or firms offer useful lessons, either general or specific, e.g. relative emphasis on products and services?
- **Where are the major opportunities for application of IT and IT-enabled services?** Which sectors in manufacturing, agriculture, and services are ripe for increasing their efficiency and/or their inclusiveness and expanding markets through the use of IT? What are the barriers to diffusion – skills, funding, mind-sets, regulations? Can government policies make a difference?
- **How can innovation and entrepreneurship be strengthened as well as spread more widely?** How can the technological spillovers and economic benefits from foreign investment and trade be maximized? What public interventions (policies, programs) can play a complementary role to private sector initiatives?

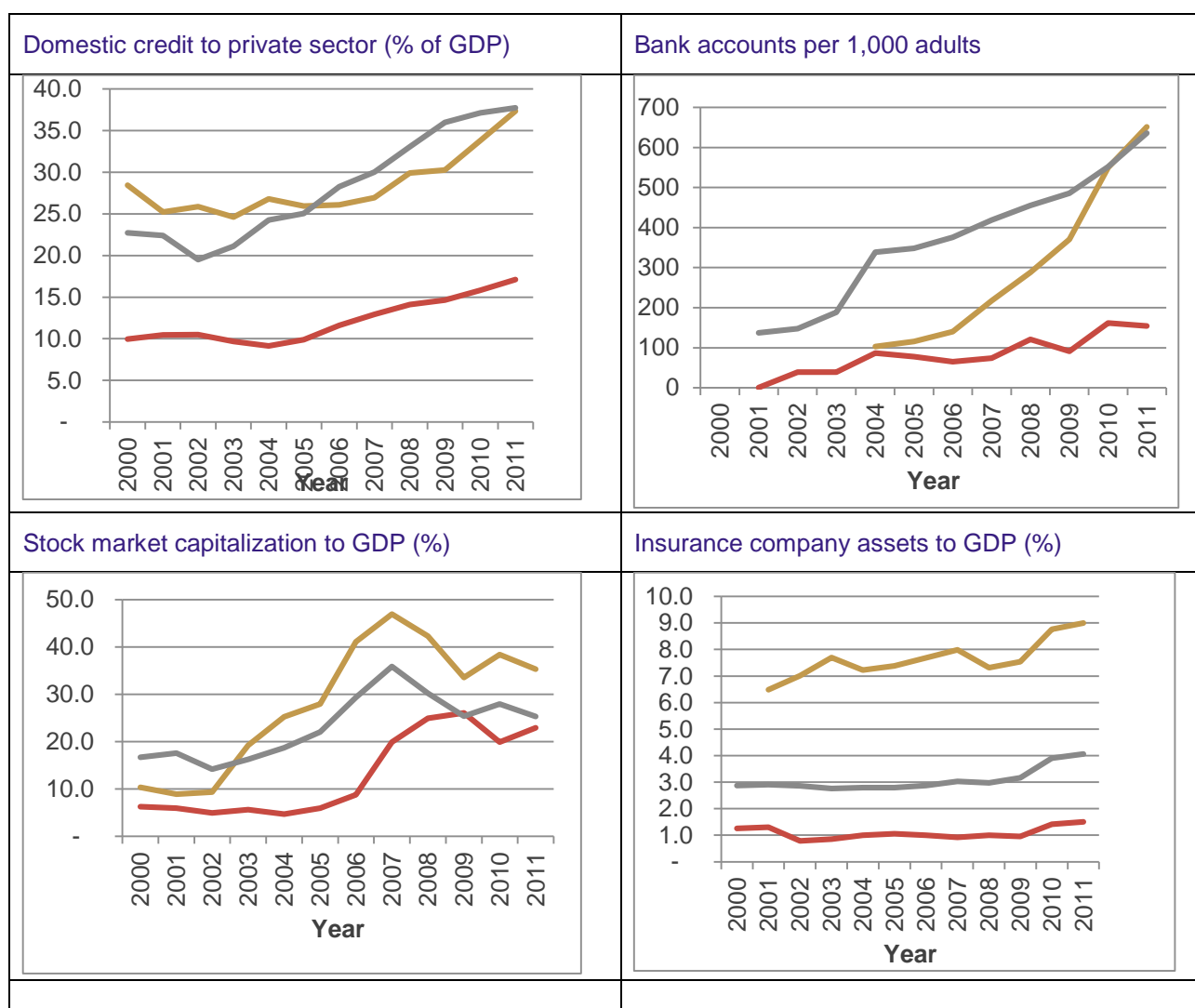
Financial services and economic transformation in Kenya

There has been recent rapid financial development in Kenya with, by 2012, financial services representing 5.2 percent of GDP and many indicators of financial development reaching or exceeding level of other sub-Saharan African countries – illustrating Kenya’s differentiated success in the sector (Table 1).

These trends reflect the increasingly strong private institutions, innovation in the industry including widespread adoption of mobile banking and the increasing presence of regional bank in Nairobi and have been supported by strong regulation.

Table 1. Key indicators of domestic financial market development

Key: Orange = Kenya; Grey = Middle-income countries; Red = Low income countries



Source: World Bank’s Global Financial Development database (Downloaded February 26th 2015)

Such progress raises the possibility that Kenya could become the financial services hub for Africa and this exciting possibility is one of the flagship projects of Kenya’s “Vision 2030”.

Types of hubs that could evolve include regional banking centres and processing hubs (e.g. call centres, data processing). Both would create much needed employment and secondary economic benefits

including stimulating backward and forward linkages and accelerating growth in aggregate demand and investment.

But there are also risks and challenges. Challenges include a fierce competitive landscape to become the regional banking centre for Africa and the need for strong regulation and a skilled labour pool. Risks include the potential to weaken domestic macroeconomic policy and the potential for increased financial fragility.

The key theme for the workshop discussion would be:

1. Do participants believe that being a financial hub is a realistic prospect?
2. If so, which type of hub is best for Kenya's structural transformation - a regional financial centre or a processing hub?
3. What is needed from private institutions, regulators and government to make it a reality?

Appendix The role of services in economic transformation, benchmarking Kenya

This appendix assesses the role of services in economic transformation on the basis of the following indicators:

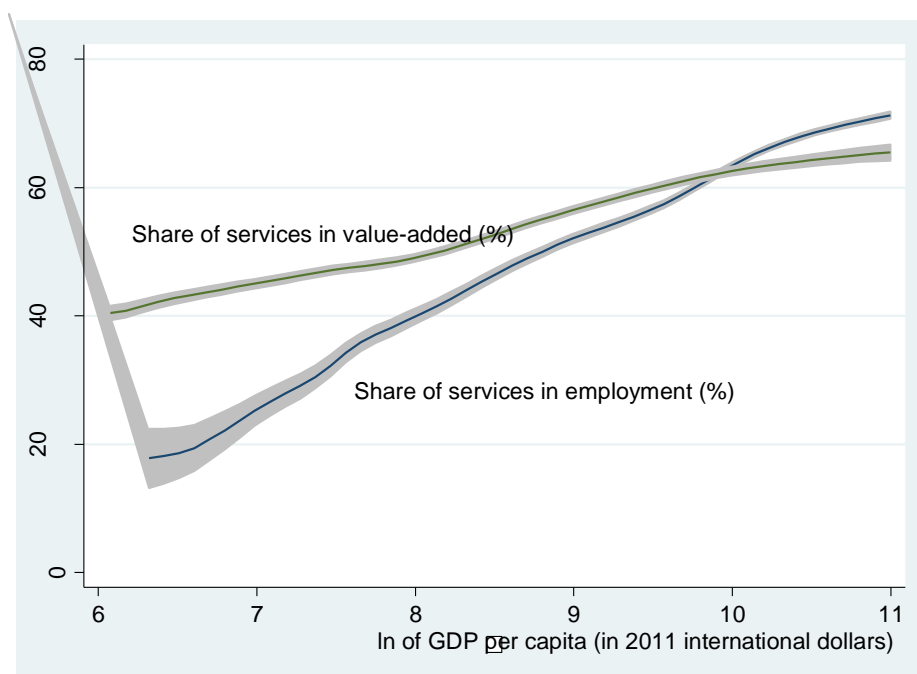
- The share of services in value added given a level of income
- The share of services in employment given a level of income
- The share of services in exports given a level of income
- The level and growth in the contribution of services to value added in exports
- The level and growth in services productivity (meso and micro)

A high level of each of these measures implies a strongly performing service sector.

1. The services share of value added and employment

The share of services in value-added and employment usually increases as countries become richer and transform themselves. Figure 1 shows that a typical LIC or LMIC has a share of services in value –added between 40-50%, and UMICs and HICs between 50-70%. In 2015, Kenya (with log of income of 7.9) which has a share of services of 50.7% in 2012 (according to WDI data), is slightly above the average share for its level of income.

Appendix Figure 1. Share of services in employment and value added, by level of income



Source: data from WDI; data for all countries from 1990 onwards, shaded area in 95% confidence interval

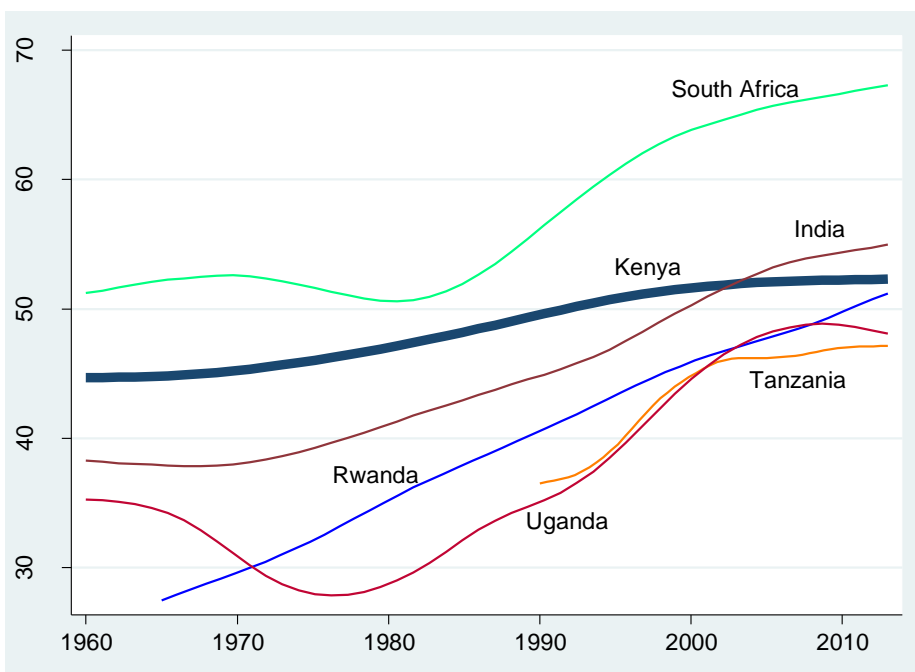
The figure also shows the evolution in the employment share of services. In Kenya, WDI data (2005) indicate a share of 32% which is below the average for that level of income.

A further important point to note from this figure is that at lower levels of income the employment share is lower than the value added share (i.e. services productivity is higher than the average of the economy), but the reverse is true for higher levels of income.

Figure 2 shows the share of services in value added over time for a number of countries. Kenya is still ahead of most other countries, but Tanzania, Uganda, and Rwanda are catching up rapidly.

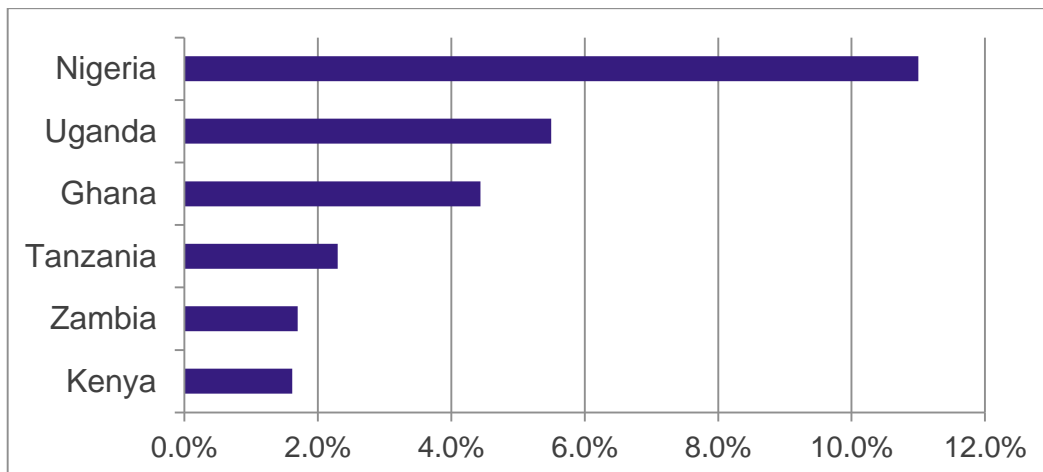
Figure 3 shows that the share of the information and communication sector in GDP (using the latest rebased data). The share is lowest for Kenya amongst comparators.

Appendix Figure 2. Share of services in value added, 1960-2013



Source: data from WDI; data for all countries from 1990 onwards. Data smoothing used.

Appendix Figure 3. Share of information and communication sector in GDP in base year after revisions



Source: te Velde presentation at a SET workshop (30 January 2015) based on national statistical offices

The lack of dynamism in Kenya's share of services in GDP can also be seen from table 1 which presents data on the share of services before and after rebasing of the national accounts. Several African countries have recently rebased their accounts and as a result have produced higher estimates of the share of services (e.g. discovering new service activities). Whilst there are also other factors that have affected recent updates of the national accounts, Kenya has not seen a large change (in fact it was the only country in the sample which has seen a decline in the services share during the rebasing).

Appendix Table 1 Share of services in GDP, pre and post rebasing

	Share Pre-rebasing	Share Post-rebasing	Difference	Year of observation / rebasing
Tanzania	47.0%	50.0%	3.0%	2007
Zambia	42.1%	54.0%	11.9%	2010
Uganda	48.0%	52.0%	4.0%	2009/10
Kenya	54.2%	52.9%	-1.3%	2009
Nigeria	23.6%	50.2%	26.6%	2010
Ghana	36.1%	51.1%	15.0%	2006

Source: te Velde presentation at a SET workshop (30 January 2015) based on national statistical offices

Table 2 shows the sectoral distribution using the latest data for 2009 and 2013. There are few large changes in the sectoral distribution, but within services it is noticeable that finance and insurance has increased from 5.9% in 2009 to 7.4% of GDP in 2013, whilst information and communication declined from 2.9% to 1.6%. Further, agriculture increased over the period, whilst manufacturing declined.

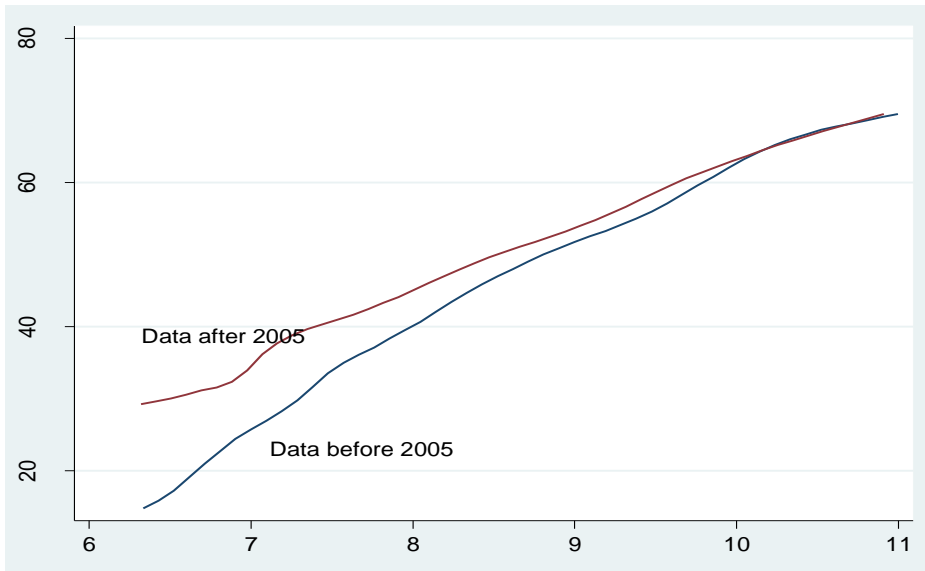
Appendix Table 2 Share of GDP by sector, Kenya

	2009	2013
Agriculture	26.1%	29.5%
Mining and quarrying	0.7%	0.9%
Manufacturing	13.4%	11.7%
Electricity and water supply	2.5%	2.2%
Construction	4.4%	5.0%
Total industry	21.0%	19.8%
Wholesale and retail trade	7.8%	8.8%
Accommodation and Restaurant	2.0%	1.4%
Transport and Storage	8.0%	8.3%
Information and communication	2.9%	1.6%
Financial and insurance services	5.9%	7.4%
Public administration	5.0%	5.4%
Professional and support services	3.0%	2.5%
Real Estate	9.6%	8.9%
Education	6.9%	6.1%
Health	2.3%	1.8%
Other services	1.7%	1.5%
FISM	-2.3%	-2.9%
Total services	52.8%	50.7%
All industries	100.0%	100.0%

Source, Kenya National Statistical Office

Figure 4 shows the share of services in employment for all countries for two periods. This reveals the very interesting finding, that the share of services is much higher after 2005 than before 2005 especially at lower levels of incomes. For example, the share of services in employment in LICs and LMICs is now 10-20% higher than previously. Authors, such as Rodrik (2015) have called this premature deindustrialisation as employment ends up in low skill services rather than manufacturing activities.

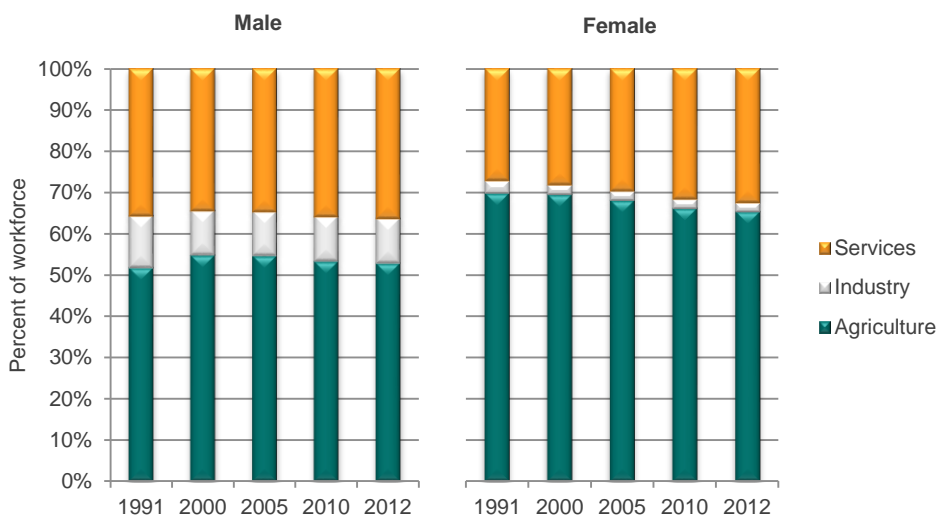
Appendix Figure 4. Share (%) of services in employment, 1980 – 2005; and 2005 to now



Source, WDI data all countries after 1990, horizontal axis is ln of GDP per capita (2011 international dollars)

Figure 5 presents employment by sex and sector from the ILO source. The share of employment in the services sectors has increased over the last decade, whilst the share of agriculture has declined and that of industry has also contracted

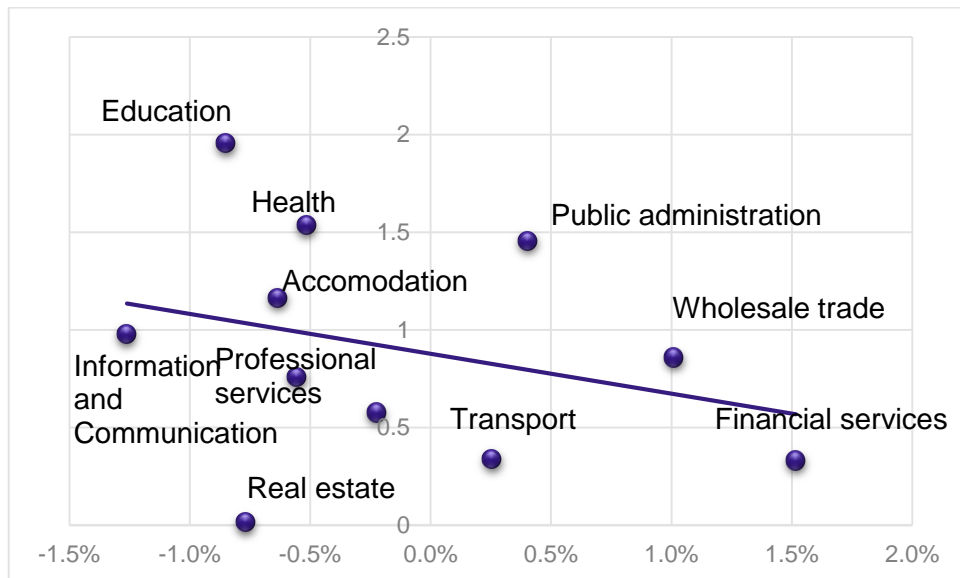
Appendix Figure 5. Total employment by sex and sector, Kenya



Source: ILO Global Employment Trends 2014 (http://www.ilo.org/global/research/global-reports/global-employment-trends/2014/WCMS_234879/lang--en/index.htm).

Figure 6 plots the change in the share of GDP for services sectors (horizontal axis) over 2013-2009 and the level of employment intensity (2009). It shows that those services that have grown fastest in terms of share of GDP are also the least employment intensive.

Appendix Figure 6. Change in share of GDP (horizontal) vs employment intensity (vertical)



Source: Statistical Abstract 2014

Note: Change in GDP share (2013-2009), percentage point, and employment intensity (2009) as wage employment divided by value added.

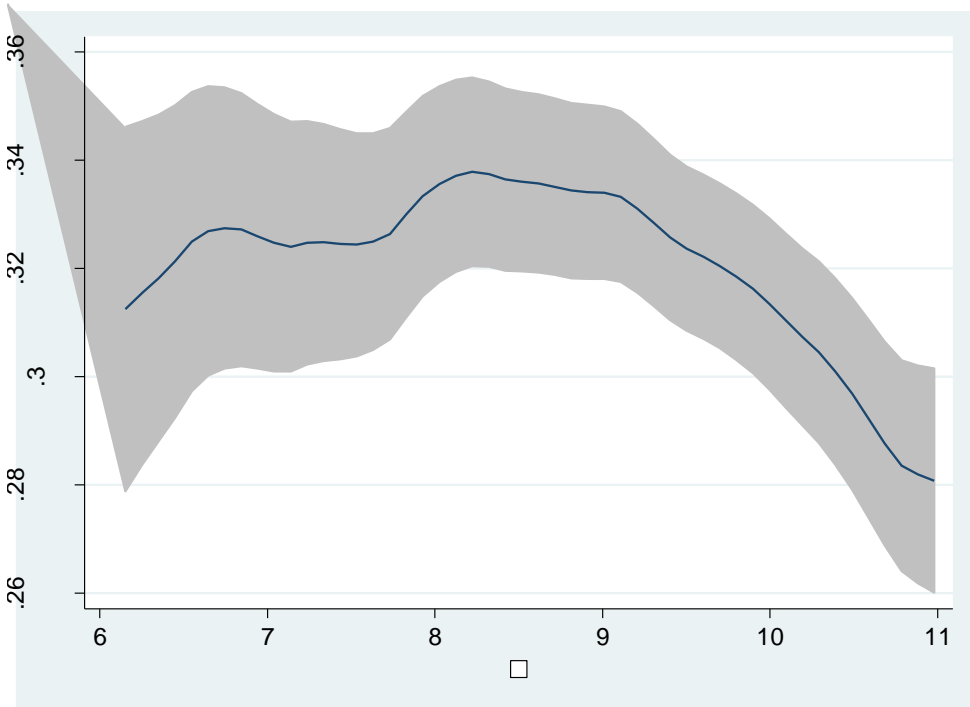
2. The share of services in trade

Figure 7 shows that the share of services in total trade (average of exports and imports) in goods and services. Interestingly it does not show the same upward trends as found for the share of services in GDP. Kenya's share of services in exports was 44% in 2012 up from 41% in 2006, much above the average, indicating the relative importance of services in Kenya's exports.

Figure 8 shows that the share of individual services categories in services exports as income progresses. Travel and communications (including ICT) are the main items, followed by transport and insurance. Kenya's share are respectively 19% and 31%, 44% and 6%, showing the relative weak performance of travel services (19% vs average of 40% at that level of income) but the relative strong performance of transportation services (44% compared to 20% at that level of income).

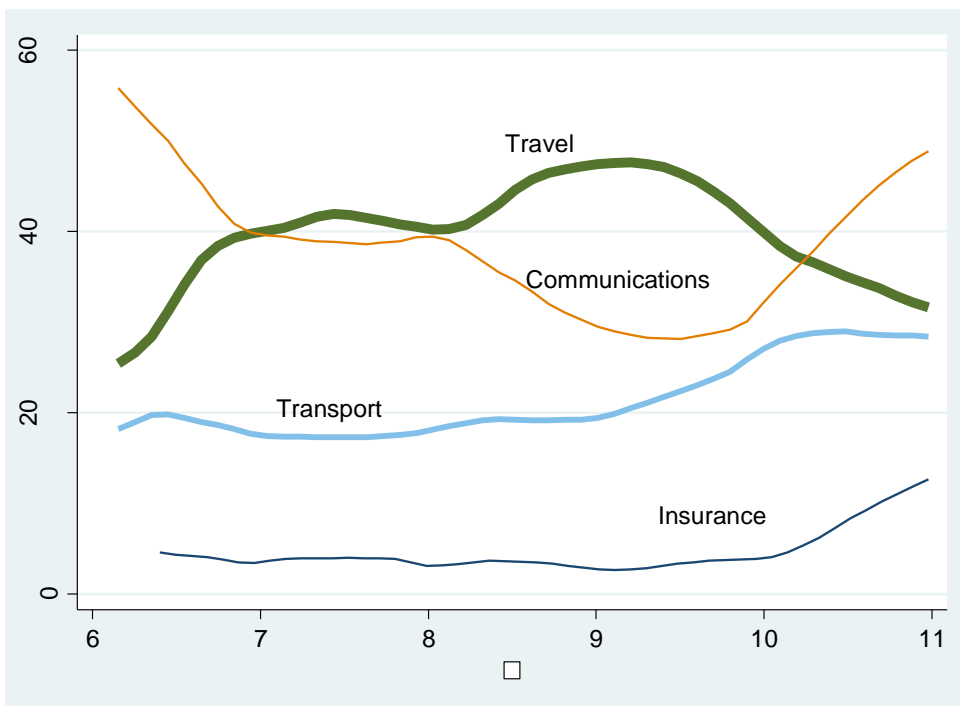
Figure 9 shows the dynamism of Kenya (and East African) exports of services in the recent decade, compared to say Nigeria (and West Africa). Exports of services from Kenya nearly tripled from \$1.9 billion in 2005 to \$4.9 billion in 2012, much more dynamic that exports of goods as total exports of goods and services doubled from \$5.3 billion to \$11.0 billion over the same period.

Appendix Figure 7. Share (expressed as ratio) of services in exports of goods and services



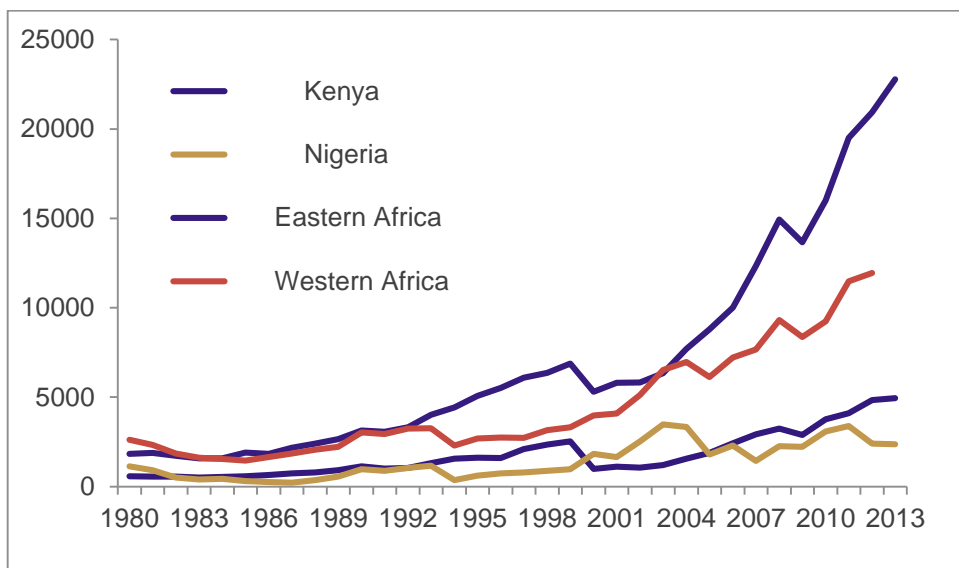
Source, WDI data all countries after 1990, horizontal axis is \ln of GDP per capita (2011 international dollars)

Appendix Figure 8. Share of service in total services exports



Source, WDI data all countries after 1990, horizontal axis is \ln of GDP per capita (2011 international dollars)

Appendix Figure 9. Dynamism in exports in services in Kenya (\$ million)

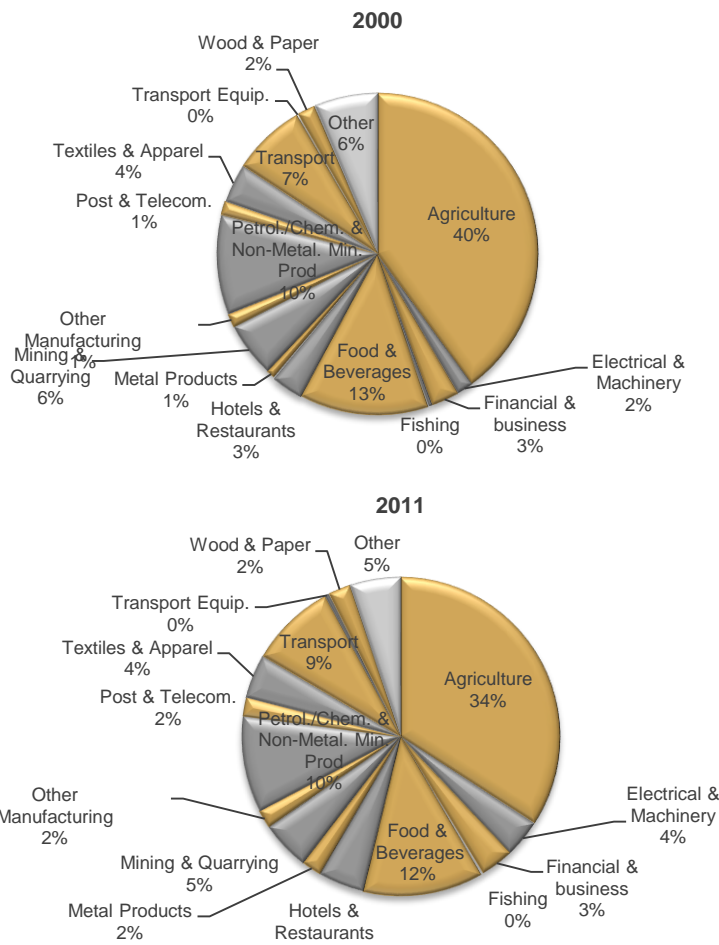


Source: UNCTAD

3. The share of services in value-added in exports

Figure 10 shows the contribution of each sector to value addition in exports (using the EORA database). The transport sector share is quite high (9%), and Transport, post and telecom, hotels, financial and business together contribute 19% of value added in Kenya's exports in 2011. This has increased from 14% in 2000. This could be a sign that Kenya's services sectors are increasingly linked to exports and could be good news – but at the same time it could be bad news if the cost of services have increased whilst services productivity has not increased.

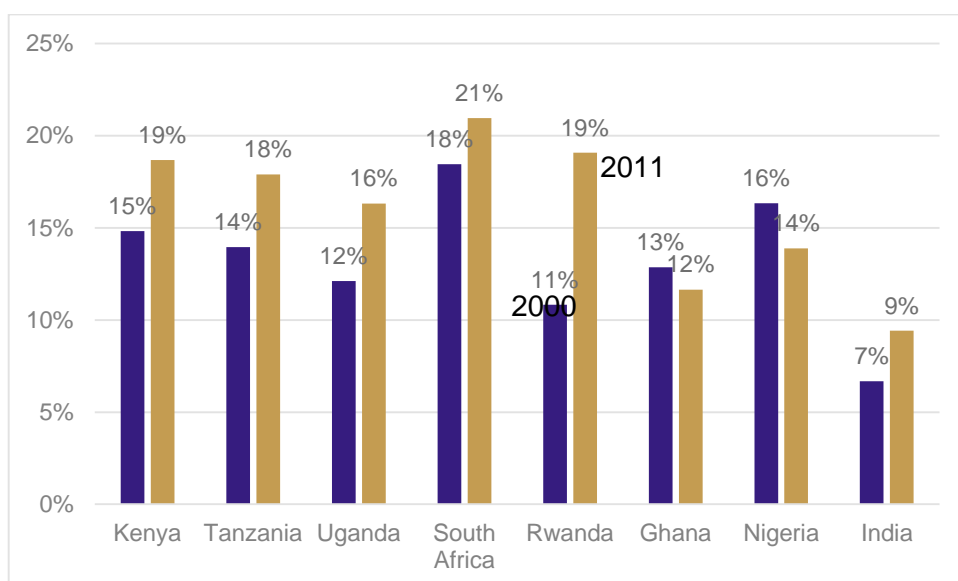
Appendix Figure 10. Sectoral DVA as a share of total DVA, 2000 and 2011, Kenya



Source: Own computations using Eora26 database

Figure 11 presents these data in a comparative context. The services share in value added in exports increased in all countries listed apart from Ghana and Nigeria where increased commodity prices increased the share of the primary sector. After South Africa, Kenya holds joint second position with Rwanda, but increases have been much faster in Rwanda.

Appendix Figure 11. Contribution of the service sectors to value addition in exports (2000 and 2011), selected countries

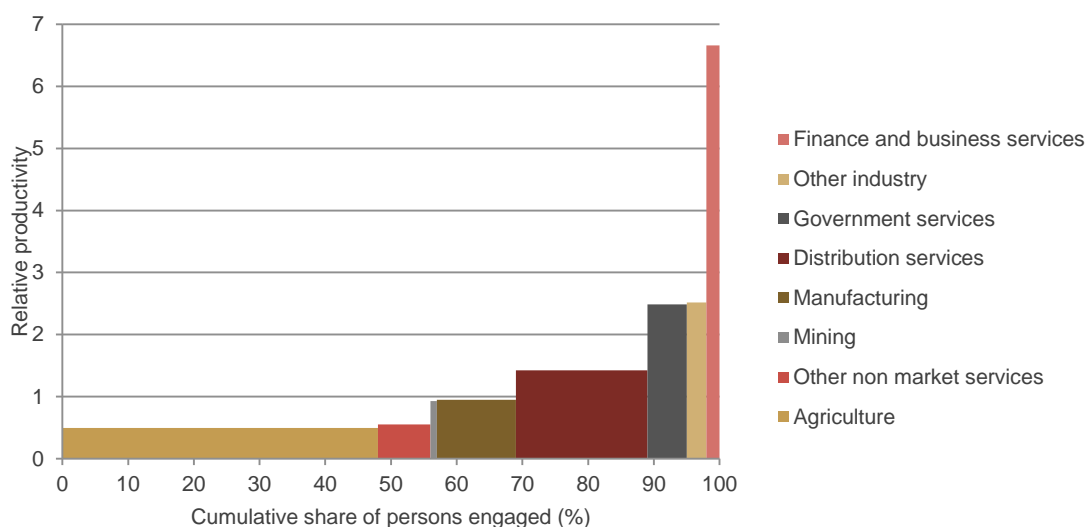


Source: own calculations using EORA database. Services include financial and business, hotels and restaurants, post and telecommunications, and transport.

4. Services productivity

We use the University of Groningen, Africa Sector database to examine sectoral labour productivity. Table 3 in the appendix presents labour and value added over 1969-2010. It also computes relative labour productivity levels. Labour productivity in services is more than 3 times higher than in agriculture and 1.5 times than in industry. Moving resources into services might seem to address productivity gaps (figure 12), but so far there has been little employment in services. Moreover, the growth of employment service has taken place in low productivity services including non-market / other service categories (see also figure 6).

Appendix Figure 12. Labour productivity gaps in Kenya, 2010



Source: Authors' calculations using the Africa Sector Database (<http://www.ruq.nl/research/ggdc/data/africa-sector-database>); de Vries et al. (2013).

Appendix Table 3 GDP, employment and relative labour productivity levels, Kenya, 1969–2010

	Gross value added (%) ^a						Number of persons engaged (%) ^b						Relative labour productivity levels ^c					
	1969	1975	1990	2000	2005	2010	1969	1975	1990	2000	2005	2010	1969	1975	1990	2000	2005	2010
Agriculture	47.3	44.0	35.0	33.8	27.8	25.5	80.6	79.8	71.2	56.1	51.9	48.3	0.5	0.4	0.4	0.5	0.5	0.5
Industry	19.0	20.4	23.0	17.8	19.5	18.9	4.6	4.6	7.2	13.1	15.7	16.4	3.8	4.2	3.0	1.5	1.2	1.2
Mining	1.0	0.8	0.8	0.5	0.6	0.8	0.1	0.2	0.1	0.5	0.5	0.6	5.4	3.0	8.3	1.1	1.2	0.9
Manufacturing	11.5	13.2	15.4	11.8	12.1	11.5	3.6	3.4	5.3	10.0	12.6	12.8	1.9	2.5	2.5	1.2	1.0	0.9
Other industry ^d	6.6	6.3	6.9	5.5	6.9	6.6	0.9	1.0	1.7	2.6	2.7	3.0	10.8	10.5	4.6	2.5	2.6	2.5
Services^e	33.7	35.6	41.9	48.4	52.7	55.7	14.7	15.6	21.6	30.8	32.4	35.3	2.9	2.9	2.2	1.7	1.6	1.6
Market services	17.4	18.8	22.3	28.8	31.2	34.7	7.9	7.0	10.9	17.5	18.9	21.1	2.8	3.1	2.3	1.7	1.6	1.7
Distribution services	13.5	14.4	16.4	21.4	23.9	25.3	7.0	6.2	9.9	15.9	17.7	19.9	2.7	2.9	2.1	1.3	1.4	1.4
Finance and business services	3.9	4.4	5.9	7.4	7.3	9.3	0.9	0.8	1.0	1.6	1.2	1.2	3.2	4.3	4.8	5.0	5.8	6.7
Non-market services	16.3	16.8	19.6	19.6	21.5	21.0	6.8	8.6	10.8	13.3	13.5	14.2	3.1	2.8	2.1	1.7	1.6	1.4
Government services	12.1	12.3	14.3	14.6	16.7	16.6	3.4	4.3	5.4	6.5	5.9	6.1	3.7	3.5	3.5	2.8	2.8	2.5
Other services	4.1	4.5	5.3	5.0	4.8	4.3	3.4	4.3	5.4	6.8	7.6	8.2	2.4	2.0	0.8	0.7	0.6	0.6
Total economy	100	100	100	100	100	100	100	100	100	100	100	100	1	1	1	1	1	1

Notes:

(a) Based on current prices in local currency.

(b) Includes paid employees, the self-employed and family workers.

(c) Derived by calculating labour productivity levels (gross value added at constant prices divided by number of persons engaged) and expressing the result as a ratio of total economy labour productivity.

(d) 'Other industry' includes construction and public services.

(e) 'Distribution' includes transport services and distributive trade as well as hotels and restaurants; 'Finance and business services' excludes real estate activities; 'Other services' include other community, personal and household services

Numbers may not sum due to rounding.

Source: Authors' calculations using the Africa Sector Database (<http://www.rug.nl/research/ggdc/data/africa-sector-database>); de Vries et al. (2013).